



**DEEP VALLEY COMPRESSOR STATION
DOMINION TRANSMISSION INC.
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL
TITLE V OPERATING PERMIT NO: R30-09500007-2006**

Dominion Transmission, Inc.
Deep Valley Compressor Station
Deep Valley, WV

Prepared for:

Dominion Transmission, Inc.
445 West Main Street
Clarksburg, WV 26301

Prepared by:

AMEC Earth & Environmental
2200 Gateway Centre Blvd, Suite 205
Morrisville, NC 27560

AUGUST 2010

A handwritten signature in cursive script, reading "Beth Espitia".

Beth Espitia, E.I.
Environmental Engineer

A handwritten signature in cursive script, reading "Susan E. Johnson".

Susan E. Johnson, P.E.
Unit Manager



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1.0 INTRODUCTION

Deep Valley Station is a natural gas compressor station used to compress gas for Dominion Transmission, Inc.'s pipeline system in West Virginia. Deep Valley Station is located in Deep Valley, West Virginia.

Deep Valley Station has the potential to emit in excess of 300 tons per year of nitrogen oxides (NOx) and 100 tons per year of volatile organic compounds (VOCs). The Station is classified as a major stationary source under the West Virginia Department of Environmental Protection (WVDEP) Regulation (45 CSR Part 30) and is subject to the Title V Operating Permit provisions of Part 30.

The Title V Operating Permit Renewal 1 (Permit No: R30-09500007-2006) was issued on May 11, 2006, with an expiration date of May 11, 2011. The Title V Operating Permit is for the operation of two (2) 800 HP natural gas fired reciprocating engines (EN01 and EN02), one (1) glycol dehydrator system (DEHY01), one (1) dehydration unit reboiler (RBR01), one (1) dehydration unit still flare (F1), two (2) 1000-gallon aboveground storage tank (TK01, TK02), one (1) 230-gallon aboveground storage tank (TK03), one (1) 4,000-gallon aboveground storage tank (TK04), one (1) 3,040-gallon aboveground storage tank (TK05), one (1) 500-gallon aboveground storage tank (TK06), and one (1) 1,000-gallon aboveground storage tank (TK07).

On August 18, 2010, Dominion Transmission, Inc. (Dominion) was issued a Title V modification permit to the existing Title V Operating Permit (Permit No: R30-09500007-2006). The modification incorporated changes from Permit R13-1104E, which allows the facility to permit the existing dehydration unit flare as an emission control device.



2.0 PROCESS DESCRIPTION

Oscar Nelson Station began operation in 1989. The main process occurring at Oscar Nelson Station is the compression and transmission of natural gas. The following emission units are present at the facility.

Two (2) 800-hp Ajax DPC-800 Reciprocating Engines/Integral Compressors

- Emission points EN01 and EN02
- Emission unit 001-01 and 001-02

Glycol Dehydration System; 0.693 MMSCF wet gas/hr

- Emission point DEHY01
- Emission unit 003-01

Dehydration Unit Reboiler; 960 scf/hr

- Emission point RBR01
- Emission unit 004-01

Dehydration Unit Controlled Flare; 5 MMBTU/hr

- Emission point F1
- Emission unit F1

One (1) 1,000-gallon horizontal, above ground tank containing ethylene glycol (TK01)

- Emission point TK01
- Emission unit TK01

One (1) 1,000-gallon horizontal, above ground tank containing triethylene glycol (TK02)

- Emission point TK02
- Emission unit TK02

One (1) 230-gallon horizontal, above ground tank containing waste water (TK03)

- Emission point TK03
- Emission unit TK03

One (1) 4,000-gallon horizontal, above ground tank containing produced fluids (TK04)

- Emission point TK04



- Emission unit TK04

One (1) 3,040-gallon horizontal, above ground tank containing lube oil (TK05)

- Emission point TK05
- Emission unit TK05

One (1) 500-gallon vertical, above ground tank containing waste water (TK06)

- Emission point TK06
- Emission unit TK06

One (1) 1,000-gallon horizontal, above ground tank containing used oil (TK07)

- Emission point TK07
- Emission unit TK07



3.0 POTENTIAL TO EMIT

Deep Valley Station is a major source of nitrogen oxides and volatile organic compounds under 45 CSR 30 of the West Virginia Code of State Regulations. Deep Valley Station is currently operating at the following potential emission rates:

Process Control Equipment	Potential Emissions, Tons Per Year (TPY)		
	Carbon Monoxide	Nitrogen Oxides	Volatile Organic Compounds
Current Potential-to-Emit	48.3	323.8	150.8
Fugitive Emissions	--	--	53.8
Engines (EN01 - EN02)	47.9	322.9	44.8
Reboiler	0.35	0.42	N/A
Dehydration System	0.09	0.44	52.25

The Dehydration Unit Still Column and Flare emissions are combined as per the 2006 R13-1104 Permit. The Flare is being permitted as a control device to limit the PTE of HAPs from the facility. The facility is not a major source of HAPs.

Onsite storage tanks are not regulated as a potential source for VOC emissions.



4.0 PROPOSED MODIFICATIONS

Dominion does not propose any new modifications under this application.



APPENDIX A

AIR PERMIT APPLICATION FORMS



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL
PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE

Charleston, WV 25304

Phone: (304) 926-0475

www.wvdep.org/daq

TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. Name of Applicant (As registered with the WV Secretary of State's Office): Dominion Transmission, Inc.		2. Facility Name or Location: Deep Valley Station	
3. DAQ Plant ID No.: 0 9 5 — 0 0 0 0 7		4. Federal Employer ID No. (FEIN): 5 5 0 6 2 9 2 0 3	
5. Permit Application Type: <input type="checkbox"/> Initial Permit <input checked="" type="checkbox"/> Permit Renewal <input type="checkbox"/> Update to Initial Permit Application When did operations commence? 1989 What is the expiration date of the existing permit? 05/11/2011			
6. Type of Business Entity: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Governmental Agency <input type="checkbox"/> Limited Partnership		7. Is the Applicant the: <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both If the Applicant is not both the owner and operator, please provide the name and address of the other party.	
8. Number of onsite employees: 0			
9. Governmental Code: <input checked="" type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> County government owned and operated; 3 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> District government owned and operated; 5			
10. Business Confidentiality Claims Does this application include confidential information (per 45CSR31)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY" guidance.			

11. Mailing Address		
Street or P.O. Box: 445 West Main Street		
City: Clarksburg	State: WV	Zip: 26301
Telephone Number: (304) 627-3225	Fax Number: (304) 627-3222	

12. Facility Location		
Street: CR 56/1	City: Deep Valley	County: Tyler County
UTM Easting: 511.63 km	UTM Northing: 4354.77 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: Travel North West on State Route 18 from West Union. At Deep Valley take Route 56 and then follow approximately 2 miles up Raymond Ridge Road (County Route 56/1) to the site.		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, for what air pollutants?
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If yes, name the affected state(s). Ohio
Is facility located within 100 km of a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, name the area(s).
If no, do emissions impact a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: Jeffrey L. Barger		Title: Vice President, Pipeline Operations
Street or P.O. Box: 445 West Main Street		
City: Clarksburg	State: WV	Zip: 26301
Telephone Number: (304) 627-3910	Fax Number: (304) 627-3323	
E-mail address: Jeffrey.L.Barger@dom.com		
Environmental Contact: Richard B. Gangle		Title: Environmental Specialist III
Street or P.O. Box: 445 West Main Street		
City: Clarksburg	State: WV	Zip: 26301
Telephone Number: (304) 627-3325	Fax Number: (304) 627-3222	
E-mail address: Richard.B.Gangle@dom.com		
Application Preparer: Beth D. Espitia		Title: Environmental Engineer
Company: AMEC Earth & Environmental, Inc.		
Street or P.O. Box: 2200 Gateway Centre Blvd, Suite 205		
City: Morrisville	State: NC	Zip: 27560
Telephone Number: (919) 447-2750	Fax Number: (919) 447-2751	
E-mail address: beth.espitia@amec.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Natural Gas Compressor Station	N/A	48612	4922

Provide a general description of operations.

The Deep Valley Station is a compressor facility that services a natural gas pipeline system. The purpose of the facility is to recompress natural gas flowing through a pipeline for transportation. The reciprocating engines (EN01 - EN02) at the facility receive natural gas from a valve on a pipeline and compress it to enable further transportation in the pipeline.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary

Instructions: Mark all applicable requirements.

<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS	<input type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26)

19. Non Applicability Determinations

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

☐ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

- 45 CSR 6-3.1 – Open Burning prohibited (TV 3.1.1, 45 CSR 13, R13-1104, 3.1.1)
- 45 CSR 6-3.2 – Open Burning exemption (TV 3.1.2, 45 CSR 13, R13-1104, 3.1.2)
- 40 CFR Part 61 – Asbestos inspection and removal (TV 3.1.3, 45 CSR 13, R13-1104, 3.1.3)
- 45 CSR 15 – Asbestos inspection and removal (TV 3.1.3, 4 CSR 13, R13-1104, 3.1.3)
- 45 CSR 11-5.2 – Standby plans for emergency episodes (TV 3.1.5, 45 CSR 13, R13-104, 3.1.6)
- 40 CFR Part 82 Subpart F – Ozone depleting substances (TV 3.1.7)
- 40 CFR Part 68 – Risk Management Plan (TV 3.1.8)
- 45 CSR 17 – Fugitive Particulate Matter (TV 3.1.11)
- 45 CSR 13 – Testing Requirements (TV 3.3.1, WV Code 22-5-4 (a) (15))
- 45 CSR 30-5.1(c)(2)(A) – Recordkeeping Requirements (TV 3.4.1, R13-1104, 4.1.1)
- 45 CSR 30-5.1(c)(2)(B) – Recordkeeping Requirements (TV 3.4.2, R13-1104, 3.4.1)
- 45 CSR 13 – Recordkeeping Requirements (TV 3.4.3, R13-2669, 3.1.1)

State Only:

- 45 CSR 4 – No Objectionable odors (TV 3.1.4, 45 CSR 13, R13-1104, 3.1.4)
- WV Code 22-5-4 (a) (14) – The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements (TV 3.1.6)
- 45 CSR 30-5.1(c) – Recordkeeping Requirements (TV 3.4.3)

☐ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

- 45 CSR 6-3.1 – The permittee shall prohibit open burning (TV 3.1.1)
- 45 CSR 6-3.2 – The permittee shall notify if open burning occurs (TV 3.1.2)
- 40 CFR Part 61 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)
- 45 CSR 15 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)
- 45 CSR 11-5.2 – Upon request by the Secretary, the permittee shall prepare a standby plan (TV 3.1.5)
- 45 CSR 30-5.1.c.2.A – Monitoring Information (TV 3.4.1, R13-1104, 4.1.1)
- 45 CSR 30-5.1.c.2.B – Retention of Records (TV 3.4.2, 45 CSR 13, R13-1104, 3.4.1)
- 45 CSR 30-4.4 – The permittee shall certify and submit monitoring reports, compliance reports, and emissions statements as specified (TV 3.5.1)
- 40 CFR Part 82 Subpart F – The permittee will prohibit maintenance, service, or repair of appliances containing Ozone depleting substances (TV 3.1.7)
- 40 CFR Part 68 – Should the permittee become subject to 40 CFR Part 68, a RMP shall be submitted (TV 3.1.8)
- 45 CSR 17 – The permittee will limit fugitive emissions from the facility (TV 3.1.11)

State only:

- 45 CSR 30-5.1.c – The permittee shall maintain records of all odor complaints (TV 3.4.3)
- WV Code 22-5-4(a)(15) – Stack Testing (TV 3.3.1)
- WV Code 22-5-4 (a) (14) – The permittee shall submit emission inventory reports as required (TV 3.1.6)

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
R13-1104D	July 20, 2006	
R13-1104E	June 22, 2010	

22. Inactive Permits/Obsolete Permit Conditions

Permit Number	Date of Issuance	Permit Condition Number
N/A	/ /	

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	48.3
Nitrogen Oxides (NO _x)	323.8
Lead (Pb)	N/A
Particulate Matter (PM _{2.5}) ¹	0.04
Particulate Matter (PM ₁₀) ¹	0.61
Total Particulate Matter (TSP)	0.61
Sulfur Dioxide (SO ₂)	0.04
Volatile Organic Compounds (VOC)	150.8
Hazardous Air Pollutants ²	Potential Emissions
Formaldehyde	3.1
Benzene	0.4
Toluene	1.2
Ethylbenzene	0.7
n-Hexane	0.1
Xylene	7.5
Acetaldehyde	0.4
Acrolein	0.4
Regulated Pollutants other than Criteria and HAP	Potential Emissions
¹ PM _{2.5} and PM ₁₀ are components of TSP. ² For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.	

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input checked="" type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	<p>19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO₂, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input type="checkbox"/>	26. Fire suppression systems.
<input type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.
<input checked="" type="checkbox"/>	<p>41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant</p>

24. Insignificant Activities (Check all that apply)	
	owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H .

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Jeffrey L. Barger

Title: Vice President, Pipeline Operations

Responsible official's signature:

Signature: _____ Signature Date: _____
(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.wvdep.org/daq, requested by phone (304) 926-0475, and/or obtained through the mail.



APPENDIX B

PLOT PLANS

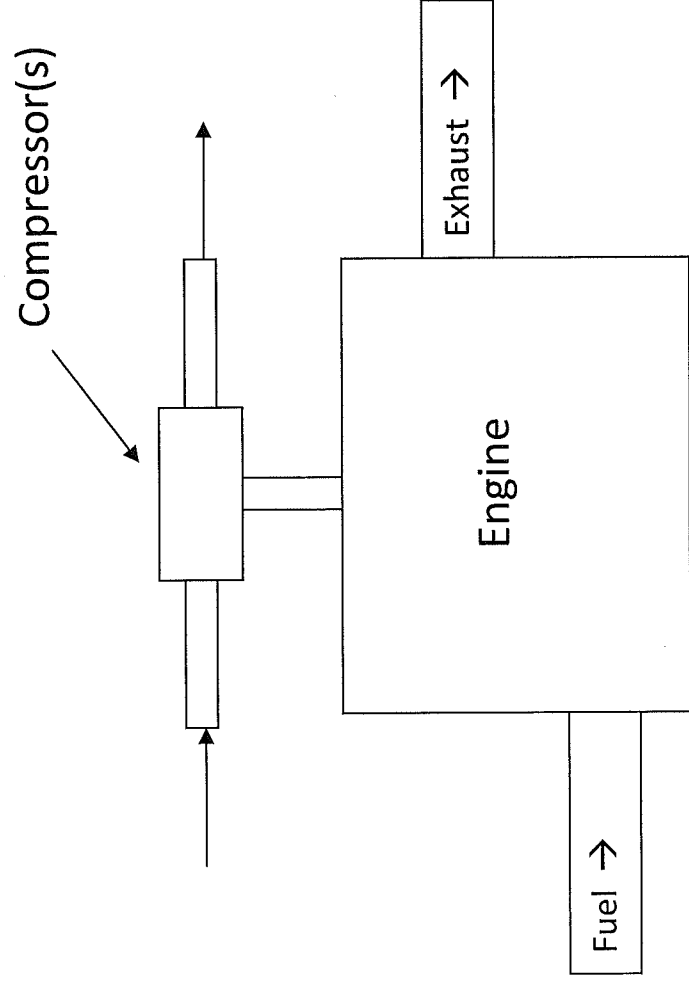
Location: 039° 20' 39.1" N 080° 51' 54.1" W
Caption: DEEP VALLEY STATION
DOMINION TRANSMISSION, INC.
AREA MAP



APPENDIX C

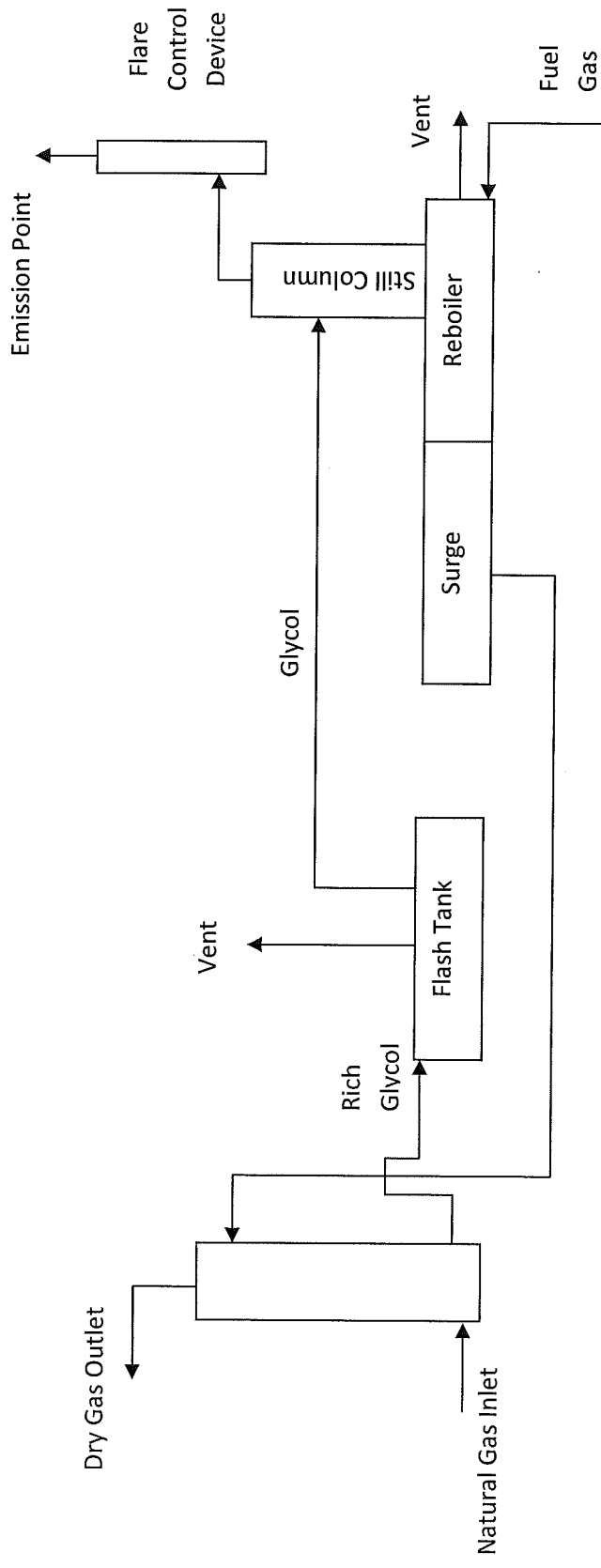
PROCESS FLOW DIAGRAMS

Natural Gas Compression Station Process Flow Diagram - Engine



Deep Valley Station
Stack ID Number: EN01
EN02

Natural Gas Compressor Station Process Flow Diagram – Glycol Dehy



Deep Valley Station
Stack ID Number: DEHY01



APPENDIX D

EQUIPMENT TABLE

ATTACHMENT D - Emission Units Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID ¹	Emission Point ID ¹	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device ¹
001-01*	EN01	Reciprocating Engine/Integral Compressor; Ajax DPC-800	1989	800 HP	N/A
001-02*	EN02	Reciprocating Engine/Integral Compressor; Ajax DPC-800	1989	800 HP	N/A
003-01*	DEHY01	Dehydration Unit Still; Tulpro	1989	0.693 mmscf/hr	F1
004-01*	RBR01	Dehydration Reboiler; Tulpro	1989	960 scf/hr	N/A
TK01	TK01	Horizontal, above ground tank containing ethylene glycol	2008	1000 gallons	N/A
TK02	TK02	Horizontal, above ground tank containing Triethylene Glycol	1998	1000 gallons	N/A
TK03	TK03	Horizontal, above ground tank containing waste water	2003	230 gallons	N/A
TK04	TK04	Horizontal, above ground tank containing produced fluids	2008	4000 gallons	N/A
TK05	TK05	Horizontal, above ground tank containing lube oil	2008	3040 gallons	N/A
TK06	TK06	Vertical, above ground tank containing waste water	2003	500 gallons	N/A
TK07	TK07	Horizontal, above ground tank containing used oil	2008	1000 gallons	N/A
F1	F1	Dehydration Unit Controlled Flare	1989	5 MMBTU/hr	N/A

* Equipment burns or combusts pipeline quality natural gas only.

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.



APPENDIX E

EMISSION UNIT FORMS

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 001-01	Emission unit name: EN01	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Ajax 800-hp Natural Gas Fired Reciprocating Engine/Integral Compressor

Manufacturer: Ajax	Model number: DPC-800	Serial number:
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Construction date:	Installation date: 1989	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
8,000 Btu/HP-hrs

Maximum Hourly Throughput: 0.0064 MMscf/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 8760 hrs/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 800 HP	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Pipeline Quality Natural Gas – 0.0064 MMscf/hr, 8,000 Btu/HP-hrs

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	< 20 gr/100 ft ³	N/A	1,000 BTU/ft ³

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	5.47	23.9
Nitrogen Oxides (NO _x)	36.9	161.5
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	<0.001	0.003
Particulate Matter (PM ₁₀)	0.064	0.28
Total Particulate Matter (TSP)	0.064	0.28
Sulfur Dioxide (SO ₂)	0.004	0.02
Volatile Organic Compounds (VOC)	5.11	22.4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.35	1.55
Benzene	0.012	0.05
Toluene	<0.01	0.03
Ethylbenzene	<0.01	<0.01
n-Hexane	<0.01	0.01
Xylene	<0.01	0.01
Acetaldehyde	0.05	0.22
Acrolein	0.05	0.22
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

NO_x, VOC, PM_{2.5} and HAPs Emission Rates based on annual emission statement submittals to WVDEP. CO, PM, and SO₂ Emission Factors were obtained from USEPA's AIRS Report (March 1990).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 001-02	Emission unit name: EN02	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Ajax 800-hp Natural Gas Fired Reciprocating Engine/Integral Compressor

Manufacturer: Ajax	Model number: DPC-800	Serial number:
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Construction date:	Installation date: 1989	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
8,000 Btu/HP-hrs

Maximum Hourly Throughput: 0.0064 MMscf/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 8760 hrs/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating: 800 HP	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Pipeline Quality Natural Gas – 0.0064 MMscf/hr, 8,000 Btu/HP-hrs

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	< 20 gr/100 ft ³	N/A	1,000 BTU/ft ³

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	5.47	23.9
Nitrogen Oxides (NO _x)	36.9	161.5
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	<0.001	0.003
Particulate Matter (PM ₁₀)	0.064	0.28
Total Particulate Matter (TSP)	0.064	0.28
Sulfur Dioxide (SO ₂)	0.004	0.02
Volatile Organic Compounds (VOC)	5.11	22.4
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Formaldehyde	0.35	1.55
Benzene	0.012	0.05
Toluene	<0.01	0.03
Ethylbenzene	<0.01	<0.01
n-Hexane	<0.01	0.01
Xylene	<0.01	0.01
Acetaldehyde	0.05	0.22
Acrolein	0.05	0.22
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

NO_x, VOC, PM_{2.5} and HAPs Emission Rates based on annual emission statement submittals to WVDEP. CO, PM, and SO₂ Emission Factors were obtained from USEPA's AIRS Report (March 1990).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 003-01	Emission unit name: DEHY01	List any control devices associated with this emission unit: F1	
Provide a description of the emission unit (type, method of operation, design parameters, etc.): Glycol Dehydration Unit Still			
Manufacturer: Tulpro	Model number:	Serial number:	
Construction date:	Installation date: 1989	Modification date(s): N/A	
Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 0.693 mmscf wet gas/hour			
Maximum Hourly Throughput: 0.693 mmscf wet gas/hour	Maximum Annual Throughput:	Maximum Operating Schedule: 8760 hrs/yr	
Fuel Usage Data (fill out all applicable fields)			
Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired	
Maximum design heat input and/or maximum horsepower rating: N/A		Type and Btu/hr rating of burners: unknown	
List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. N/A			
Describe each fuel expected to be used during the term of the permit.			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 45 CSR 10-4.1 – SO₂ emissions shall not exceed 2,000 ppm by volume (TV 3.1.9).
45 CSR 10-5.1 – H₂S emissions shall not exceed 50 gr/100 cu ft (TV 3.1.10).
45 CSR 13 – HAP emissions shall be less than 10 TPY of any single HAP and 25 TPY of any combination of HAPs (TV 3.1.12, R13-1104E, 4.1.2).
45 CSR 13 – The maximum wet natural gas shall not exceed 18 mmcf/day (TV 5.1.1, R13-1104E, 6.1.1).
45 CSR 13 – Maximum Emissions from F1 (TV 5.1.2, R13-1104E, 6.1.2).
45 CSR 13 – Determining Potential HAP Emissions (TV 5.1.3, R13-1104E, 6.1.3, 40 CFR 63, Subpart HH).
45 CSR 13 – Wet Gas Throughput Monitoring (TV 5.2.2, R13-1104E, 6.2.2).
45 CSR 13 – The permittee shall install, maintain and operate all pollution control equipment listed on the Equipment Table (TV 5.1.10, R13-1104E, 4.1.8).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

- 45 CSR 30-5.1(c) - TV 3.1.9 shall be complied with by annual sampling of inlet natural gas stream (TV 3.2.2)
45 CSR 30-5.1(c) - TV 3.1.10 shall be complied with by annual sampling of inlet natural gas stream (TV 3.2.3).
45 CSR 13 – Determining Potential HAP Emissions (TV 5.1.3, R13-1104E, 6.1.3, 40 CFR 63, Subpart HH).
45 CSR 13 – Permittee shall demonstrate compliance with 5.1.1 by maintaining monthly records of the wet natural gas throughput for up to five years on site and using a twelve month rolling total (TV 5.1.1, R13E-1104, 6.1.1, and 5.4.6)
45 CSR 13 – Permittee shall demonstrate compliance with 5.1.2 by maintaining monthly records of the wet natural gas throughput for up to five years on site (TV 5.4.6)
45 CSR 13 – Permittee shall demonstrate compliance with 5.1.3, upon request by the Director, using GLYCalc Version 3.0 or higher (TV 5.3.3, 45 CSR 13, R13-1104E, 6.3.3).
45 CSR 13 – Permittee shall maintain records of wet natural gas throughput through the dehydration unit on a monthly basis (TV 5.2.2, R13-1104E, 5.2.2)
45 CSR 13 – TV 5.1.10 shall be complied with by maintaining records of any occurrences of malfunctions or shutdown of the air pollution control equipment (TV 5.4.8, 45 CSR 13, R13-1104, 4.1.4)

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.02	0.09
Nitrogen Oxides (NO _x)	0.10	0.44
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})	<0.01	0.03
Particulate Matter (PM ₁₀)	0.01	0.05
Total Particulate Matter (TSP)	0.01	0.05
Sulfur Dioxide (SO ₂)	<0.01	<0.01
Volatile Organic Compounds (VOC)	11.93	52.25
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.07	0.28
Toluene	0.26	1.15
Ethylbenzene	0.16	0.7
Xylene	1.71	7.47
n-Hexane	<0.01	0.02
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<p>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</p> <p>VOC and HAP Emission Rates based on emission required permitted maximums. SO₂, NO_x and CO Emission Factors were obtained from Table 1.4-2 of AP-42 (7/93). PM Emission Factor was obtained from Table 1.4-1 of AP-42 (7/93).</p>		

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: 004-01	Emission unit name: RBR01	List any control devices associated with this emission unit: N/A
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 Dehydration unit reboiler

Manufacturer: Tulpro	Model number:	Serial number:
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Construction date:	Installation date: 1989	Modification date(s): N/A
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
 960 scf/hr

Maximum Hourly Throughput: 960 scf/hr	Maximum Annual Throughput:	Maximum Operating Schedule: 8760 hrs/yr
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 960 scf/hr	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
 Natural Gas – 960 scf/hr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	< 20 gr/100 ft ³	N/A	

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.08	0.35
Nitrogen Oxides (NO _x)	0.10	0.42
Lead (Pb)	N/A	N/A
Particulate Matter (PM _{2.5})		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

CO and NO_x Emission Factors based on emission required permitted maximums.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 – HAP emissions shall be less than 10 TPY of any single HAP and 25 TPY of any combination of HAPs (TV 3.1.12, R13-1104E, 4.1.2).

45 CSR 2-3.1 – Opacity limit of less than ten (10) percent (TV 4.1.1, R13-1104, 5.1.1).

45 CSR 2-3.2 and 45 CSR 13 Compliance with visible emission requirement shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using a COMS if directed by Director (TV4.1.2, R13-1104, 5.1.2).

45 CSR 13 – Maximum Design Heat Input shall not exceed 1.0 mmBTU/hr (TV 4.1.3, R13-1104, 5.1.3)

45 CSR 13 – Quantity of natural gas consumed shall not exceed 960 cubic feet per hour or 8.41×10^6 cubic feet per year (TV 4.1.4, R13-1104, 5.1.4)

45 CSR 13 - Maximum emissions shall not exceed prescribed limits (TV 4.1.5, R13-1104, 5.1.5).

____ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 13 – TV 3.1.12 shall be complied with by determining Potential HAP Emissions (TV 5.1.3, R13-1104E, 6.1.3, 40 CFR 63, Subpart HH).

45 CSR 2-3.1 - TV 4.1.1 shall be complied with by performing opacity readings upon request from Department (TV 4.2.1, 45 CSR 13, R13-1104, 5.1.1).

45 CSR 2-3.2 and 45 CSR 13 – Compliance with visible emission requirement shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using a COMS if directed by Director (TV 4.1.2, R13-2626C, 5.1.2).

45 CSR 13 – TV 4.1.4 shall be complied with by monitoring the natural gas consumed on a monthly basis (TV 4.2.2).

45 CSR 13 – TV 4.1.4 and TV 4.1.5 shall be complied with by maintaining records of the amount of natural gas consumed (TV 4.4.1).

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number:
F1

List all emission units associated with this control device.
DEHY01

Manufacturer:

Model number:

Installation date:

1989

Type of Air Pollution Control Device:

☐ Baghouse/Fabric Filter ☐ Venturi Scrubber ☐ Multiclone
☐ Carbon Bed Adsorber ☐ Packed Tower Scrubber ☐ Single Cyclone
☐ Carbon Drum(s) ☐ Other Wet Scrubber ☐ Cyclone Bank
☐ Catalytic Incinerator ☐ Condenser ☐ Settling Chamber
☐ Thermal Incinerator ☒ Flare ☐ Other (describe) _____
☐ Wet Plate Electrostatic Precipitator ☐ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		95%
Benzene		95%
Ethylbenzene		95%
n-Hexane		95%
Toluene		95%
Xylene		95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Tulpro Dehydration Unit Controlled Flare
5 MMBTU/hr non-assisted burner

Is this device subject to the CAM requirements of 40 C.F.R. 64? ☐ Yes ☒ No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.** The Permittee is conducting reasonable assurance compliance monitoring to maintain minor source classification in accordance with the requirements of 40 CFR 63, Subpart HH.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

45 CSR 13 – Maximum emissions from flare shall not exceed prescribed limits (TV 5.1.2, R13-1104, 6.1.2).

45 CSR 13 – Flare shall be designed and operated with specified terms (TV5.1.4, R13-1104, 6.1.4).

45 CSR 13 – Permittee is not required to contact a flare compliance assessment until the Director requests one. The permittee is required to conduct a flare design evaluation or demonstrate compliance with the flare design criteria requirements in TV 5.1.4 (TV5.1.5, R13-1104, 6.1.5).

45 CSR 6-4.3 and 45 CSR 13 – Visible particulate matter emissions from the flare (F1) shall not exceed twenty (20%) percent opacity (TV 5.1.6, R13-1104, 6.1.6).

Describe the parameters monitored and/or methods used to indicate performance of this control device.

45 CSR 6-4.4 and 45 CSR 13 – TV 5.1.6 does not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up (TV 5.1.7, R13-1104 6.1.7).

45 CSR 6-4.6 and 45 CSR 13 – The flare (F1) including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of odors (TV 5.1.8, R-13-1104, 6.1.8).

45 CSR 6-4.1 – Particulate matter cannot exceed determined quantity (TV 5.1.9).

45 CSR 13 – The permittee shall install, maintain and operate all pollution control equipment listed on the Equipment Table (TV 5.1.10, R13-1104, 4.1.3).

45 CSR 13 – The flame will be monitored by a thermocouple or other equivalent device, except during SSM events (TV 5.2.1, R13-1104, 6.2.1).

45 CSR 13 – The throughput of wet natural gas feed to the dehydration system (DEHY01) shall be monitored on a monthly basis (TV 5.2.2, R13-1104, 6.2.2).

45 CSR 13 – Permittee will conduct a flare compliance assessment to demonstrate compliance with TV 5.1.4 upon request by the Director (TV 5.3.2, R13-1104, 6.3.2)

45 CSR 13 – Record of the times and duration of all periods during which the pilot flame was absent shall be maintained (TV 5.4.1, R13-1104, 6.4.1)

45 CSR 13 – A record of flare design evaluation shall be maintained (TV 5.4.2, R13-1104, 6.4.2).

45 CSR 13 – Records shall be maintained that demonstrate compliance with HAP emissions thresholds using GRI-GlyCalc Version 3.0 or higher (TV 5.4.3, R13-1104, 6.4.3).

45 CSR 13 – Records shall be maintained of all monitoring and testing (TV 5.4.4, R13-1104, 6.4.4).

45 CSR 13 – Records shall be maintained of visible emission opacity tests conducted (TV 5.4.5, R13-1104, 6.4.5).



APPENDIX F

P.E. CERTIFICATION



P.E. Certification

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments as they pertain to the practice of engineering. This is defined as the performance of a professional service such as consultation, investigation, evaluation, planning, design or supervision of construction or operation in connection with any utilities, structures, buildings, machines, equipment, processes, works, or projects wherein the safeguarding of life, health and property is concerned, when such service or work requires the application of engineering principals and data. Based on my inquiry of those individuals with primary responsibility for obtaining such information, I certify that the statements and information are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name of P.E. Susan E. Johnson

Signature of P.E. Susan E. Johnson

Date 8 / 27 / 2010

WV License No. 18653

Phone (919) 447- 2750

